



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,193	11/19/2001	Manuel Barbosa	11017-0003	8121

7590 01/23/2004

CLARK & BRODY  
Suite 600  
1750 K Street, NW  
Washington, DC 20006

EXAMINER

NGUYEN, XUAN LAN T

ART UNIT	PAPER NUMBER
----------	--------------

3683

DATE MAILED: 01/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/988,193

Applicant(s)

BARBOSA, MANUEL

Examiner

Lan Nguyen

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6,7,9,10 and 12-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6,7,9,10 and 12-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 03 March 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. The abstract of the disclosure is objected to because on line 4, "this damped steel" should be -- thin damped steel --; and on line 5, "NVH" should be spelled out. Correction is required. See MPEP § 608.01(b).

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaneshiro et al.

Re: claim 1, Kaneshiro et al. show a backing plate, as in the present invention, comprising: abutment plate means 3 for resisting braking forces; and shielding plate 2 made of damped steel for shielding brake components from dust and dirt and reducing noise and vibrations.

Re: claims 13 and 14, Figure 1 of Kaneshiro further shows that the abutment plate means 3 and the shielding plate 2 are attached to each other; and the shielding plate 2 is configured to have a hydraulic cylinder 4 mounted thereon.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneshiro et al. in view of Hansen et al.

Kaneshiro's shielding plate, as discussed in the above rejection of claim 1, is silent to the two outer steel sheets of equal thickness. Hansen et al. teach the structure of a damped steel wherein the two outer steel sheets are of equal thickness in column 3, lines 60-63. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed Kaneshiro's shielding plate with a damped steel such as taught by Hansen; since said damped steel which consists of two outer steel sheets of equal thickness exhibits superior dampening capability over a wide range of temperature as taught by Hansen et al. and would increase the performance and prolong the life of the shielding plate.

6. Claims 1, 3, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turak et al. in view of Hansen et al.

Re: claims 1 and 3, Turak et al. show a backing plate, as in the present invention, comprising: abutment means 30 for resisting braking forces wherein said abutment means comprises an upper portion for engaging an axle per bolt holes 36 and a lower portion for engaging brake shoes 16, 18 at 22; and shielding plate 32 for shielding brake

components from dust and dirt and reducing noise and vibrations. Turak lacks the disclosure of a damped steel with two outer steel sheets of equal thickness as a material for the shielding plate. Hansen et al. teach the use of a damped steel with two outer steel sheets of equal thickness to dampen noise and vibration in a brake system, see column 1, lines 10-19 and column 3, lines 60-63. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed Turak's shielding plate with a damped steel with two outer steel sheets of equal thickness such as taught by Hansen; since said damped steel exhibits superior dampening capability over a wide range of temperature as taught by Hansen et al. and would be more durable in protecting the brake components from dust and dirt in order to prolong the life of the brake system.

Re: claims 13 and 14, Figure 1 of Turak further shows that the abutment means 30 and the shielding plate 32 are attached to each other; and the shielding plate 32 is configured to have a hydraulic cylinder 4 mounted thereon via the abutment means.

7. Claims 4, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turak et al. in view of Hansen et al.

Re: claim 4, Turak et al. show a backing plate, as in the present invention, comprising: an abutment plate 30 comprising a first part to be attached to an axle of a vehicle per bolt holes 36 and a second part extending from said first part and configured to resist braking forces by brake shoes 16, 18 during braking at 22; and a shielding plate 32 extending beyond said abutment plate and configured to shield brake components, wherein said abutment and shielding plates are made of different

Art Unit: 3683

materials, see column 6, lines 22-24 and said shielding plate dampens noise, see Abstract. Turak lacks the disclosure of a damped steel as a material for the shielding plate. Hansen et al. teach the use of a damped steel to dampen noise and vibration in a brake system, see column 1, lines 10-19. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed Turak's shielding plate with a damped steel such as taught by Hansen; since said damped steel exhibits superior dampening capability over a wide range of temperature as taught by Hansen et al. and would increase the performance and prolong the life of the shielding plate.

Re: claim 6, Hansen further teaches said damped steel comprises first and second layers of steel of approximately equal thickness in column 3, lines 59-65. Turak's backing plate, as modified, would have the damped steel with first and second layers of steel of approximately equal thickness.

Re: claim 7, Turak shows in column 6, lines 22-24 that said abutment plate is made of steel.

8. Claims 9, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turak et al. in view of Hansen et al.

Re: claim 9, Turak et al. show a shielding plate 32 configured to be attached to a vehicle and at least partially encompass brake components to protect said brake components from dust and dirt, see column 3, lines 17-20; and an abutment plate 30 configured to engage a vehicle housing per bolt holes 36 and to engage brake shoes 16, 18 and to resist braking forces at 22 applied by said brake shoes, wherein said abutment plate and shielding plate are made of different materials, see column 6, lines

22-24. Turak lacks the disclosure of a damped steel as a material for the shielding plate. Hansen et al. teach the use of a damped steel to dampen noise and vibration in a brake system, see column 1, lines 10-19. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed Turak's shielding plate with a damped steel such as taught by Hansen; since said damped steel exhibits superior dampening capability over a wide range of temperature as taught by Hansen et al. and would be more durable in protecting the brake components from dust and dirt in order to prolong the life of the brake system.

Re: claim 10, Turak shows said brake system to be of a drum brake.

Re: claim 12, Hansen further teaches said damped steel comprises first and second layers of steel of approximately equal thickness in column 3, lines 59-65. Turak's backing plate, as modified, would have the damped steel with first and second layers of steel of approximately equal thickness.

9. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turak et al. in view of Hansen et al.

Re: claim 15, Turak et al. show a drum brake, as in the present invention, comprising: an abutment plate 30 comprising a sheet of steel, see column 6, lines 22-24, having a first part configured to attach to an axle housing per bolt holes 36 and a second part configured to resist braking forces by brake shoes 16, 18 during braking at 22; and a shielding plate 32 attached to said abutment plate and configured to support said brake shoes, wherein said abutment and shielding plates are made of different materials, see column 6, lines 22-24. Turak lacks the disclosure of a damped steel as a

material for the shielding plate. Hansen et al. teach the use of a damped steel to dampen noise and vibration in a brake system, see column 1, lines 10-19. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed Turak's shielding plate with a damped steel such as taught by Hansen; since said damped steel exhibits superior dampening capability over a wide range of temperature as taught by Hansen et al., is more durable than plastic and would prolong the life of the drum brake.

Re: claim 16, Turak show in figure 1 that said shielding plate is configured to receive a hydraulic cylinder 14.

Re: claim 17, Hansen further teaches said damped steel comprises first and second layers of steel of approximately equal thickness in column 3, lines 59-65. Turak's backing plate, as modified, would have the damped steel with first and second layers of steel of approximately equal thickness.

### ***Response to Amendment***

10. Applicant's argument about claim 1 and its dependent claims under the sixth paragraph of 35 USC 112 is acknowledged. It is noted that the claim language is not proper because it recites the structure of the abutment plate. It is suggested that line 2 of claim 1 be amended to state -- abutment means -- in place of "abutment plate means". Please consult MPEP section 2181 for further details. Since the claim language of claim 1 is not proper, the rejection based on Kaneshiro is repeated above. To further prosecution of the instant application, a rejection of claims 1, 3, 13 and 13



based on Turak in view of Hansen is also included. In this rejection, claim 1 is treated as --abutment means-- in place of "abutment plate means" in line 2 in order to satisfy the requirement of a "means plus function" claim language. The description of said abutment means is taken from Applicant's argument in page 4 of the response dated 11/06/03, page 4, paragraph 17 of the specification and the figures.

11. New rejections of claims 4, 6, 7, 9, 10, 12 and 15-17 are presented above due to Applicant's amendments to the claims.

### ***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is 703-308-8347. The examiner can normally be reached on M-F, 8 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-4177.



Application/Control Number: 09/988,193

Page 9

Art Unit: 3683

*Lan Nguyen*

Patent Examiner

A. U. 3683

January 21, 2004